

E1
Excluded
binding between XRCC4 and DNA ligase IV, or XRCC4 and DNA-PK_{cs}/Ku or XRCC4, DNA ligase IV and DNA-PK_{cs}/Ku.

E2
Q1 E2
3. (amended) A method for identifying a compound X which inhibits DNA ligase IV activity, the method including the steps of:

- (i) contacting DNA ligase IV, XRCC4 and compound X; and
- (ii) determining DNA ligase activity in the presence and the absence of compound X, a decrease in the activity in the presence relative to the absence of compound X being indicative that compound X inhibits the activity of DNA ligase IV.

E3
Q1 E3
6. (amended) A method comprising

- (i) contacting a compound X, DNA-PK_{cs}/Ku and XRCC4; and
- (ii) determining phosphorylation of said XRCC4 in the presence and absence of [test] compound X;
a decrease in phosphorylation in the presence relative to the absence of compound X being indicative that compound X inhibits the phosphorylation of XRCC4 by DNA-PK_{cs}/Ku.

E4
Q1 E4
19. (amended) A method comprising obtaining a compound X which inhibits the binding between XRCC4 and DNA ligase IV, or XRCC4 and DNA-PK_{cs}/Ku, or XRCC4 and DNA ligase IV and DNA-PK_{cs}/Ku, employing a method according to claim 1; and, formulating said compound X into a composition which comprises a pharmaceutically acceptable excipient.

E5
Q1 E5
22. (amended) A method comprising obtaining a compound X which inhibits DNA ligase IV activity employing a method according to claim 3 and formulating said compound X into a composition which comprises a pharmaceutically acceptable excipient.

E6
Q1 E6
25. (amended) A method comprising obtaining a compound X which inhibits DNA-PK_{cs}/Ku phosphorylation of XRCC4 employing a method according to claim 6 and formulating said compound X into a composition which comprises a pharmaceutically acceptable excipient.

REMARKS

Claims 1, 3, and 6-28 are pending after entry of the amendments set forth herein. Claims 1, 3, 6, 19, 22 and 25 have been amended. Claims 2 and 4 are canceled, without